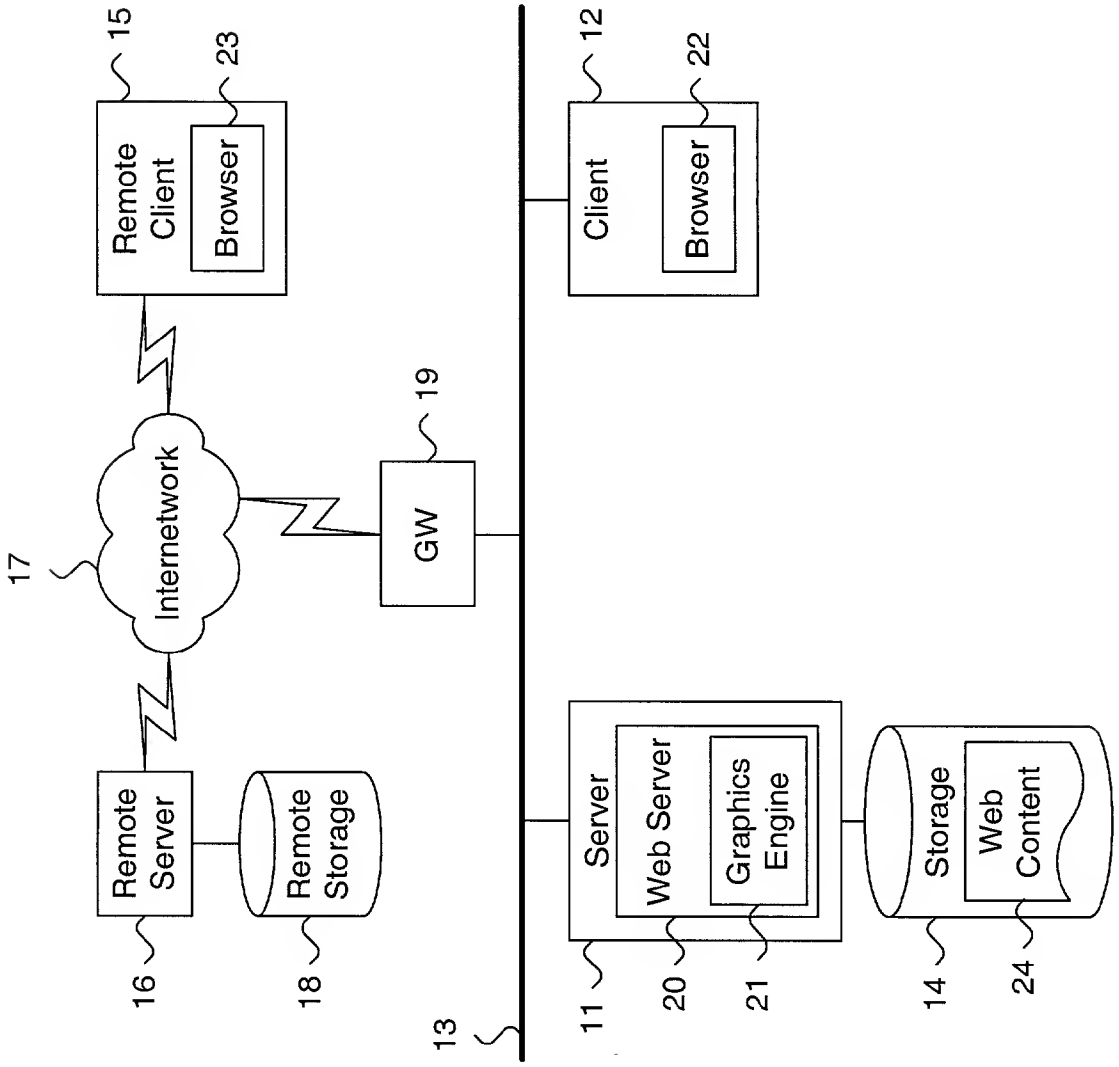

10
Remote Server
16
Remote Storage
18
17
Internetwork
GW
19
Remote Client
15
Browser
23
13
Server
11
Web Server
20
Graphics Engine
21
Client
12
Browser
22
Storage
14
Web Content
24

Figure 1.

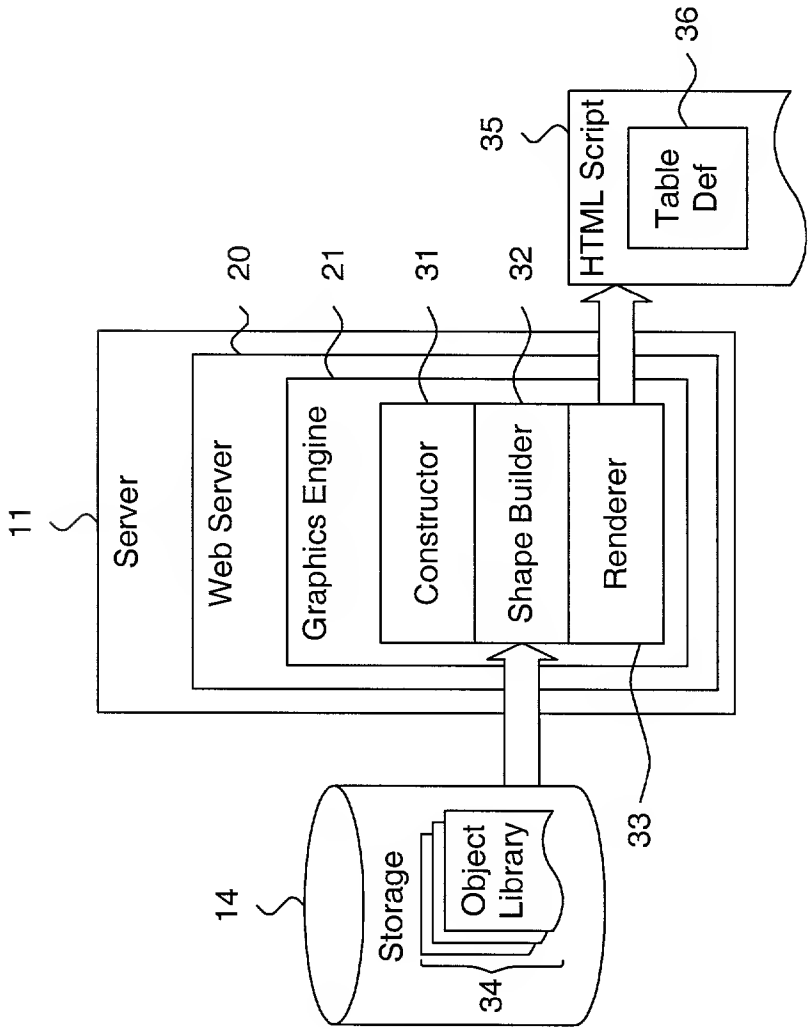

30
11
Server
Web Server
20
Graphics Engine
21
Constructor
31
Shape Builder
32
Renderer
33
HTML Script
35
Table Def
36
Storage
14
Object Library
34

Figure 2.

Figure 3.

50

```
public class HtmlGraphics {
  private HtmlCell mBackgroundCell;
  private Vector mRowVect;
  private int mWidthPix;
  private int mHeightPix;
  public HtmlGraphics(String pBgColor, int pWidthPix,
                      int pHeightPix) { }
    .
    .
    .

  public void fillRect(Color pColor, Text pText,
                       Text pBubbleText, int pX, int pY,
                       int pWidthPix, int pHeightPix) { }
    .
    .
    .

  public String render() { }
    .
    .
    .

}
```

Figure 4A.

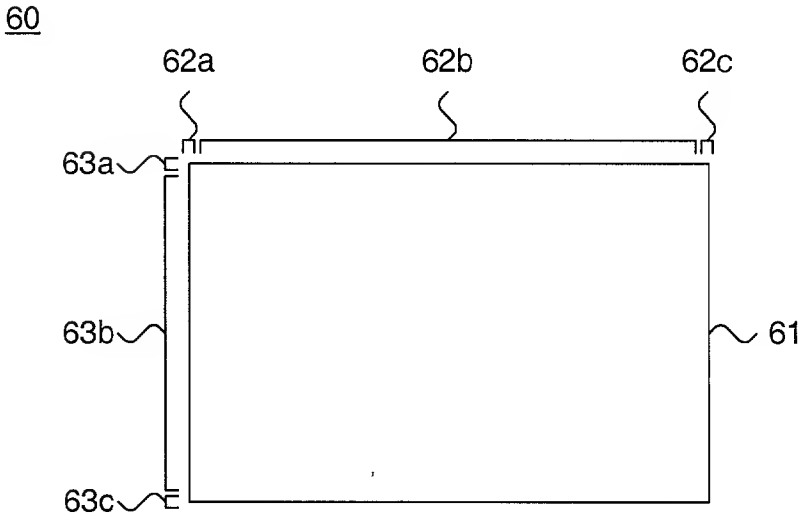


Figure 4B.

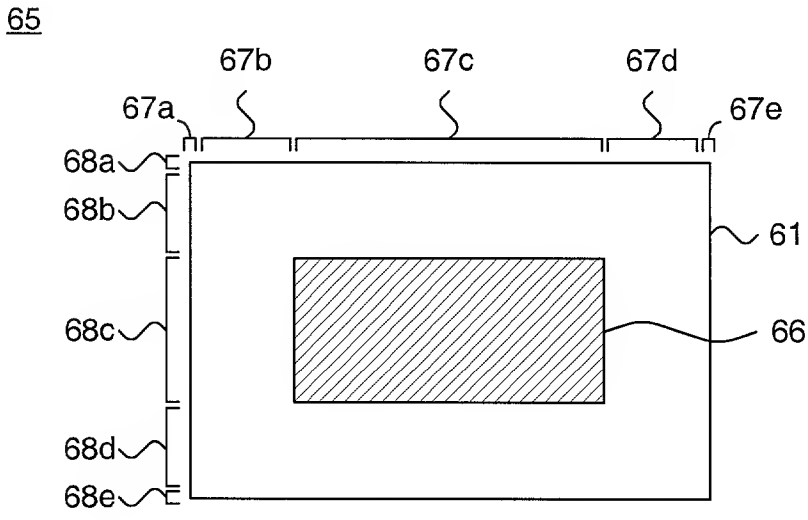


Figure 5.

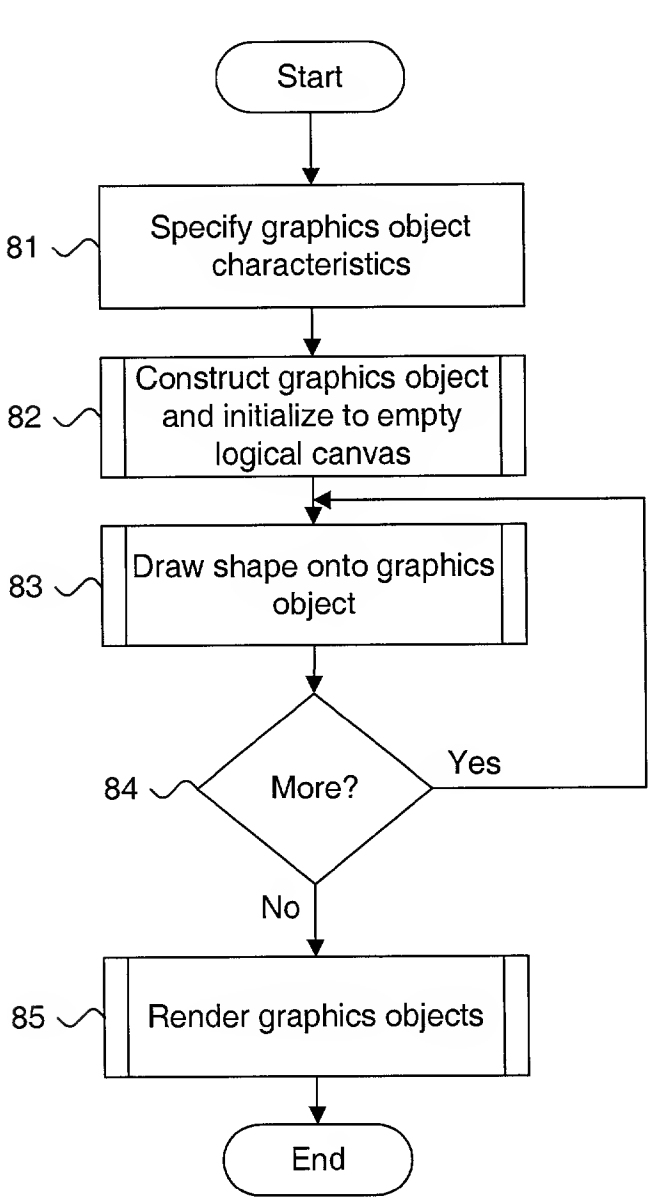

80
Start
81
Specify graphics object characteristics
82
Construct graphics object and initialize to empty logical canvas
83
Draw shape onto graphics object
84
More?
Yes
No
85
Render graphics objects
End

Figure 6.

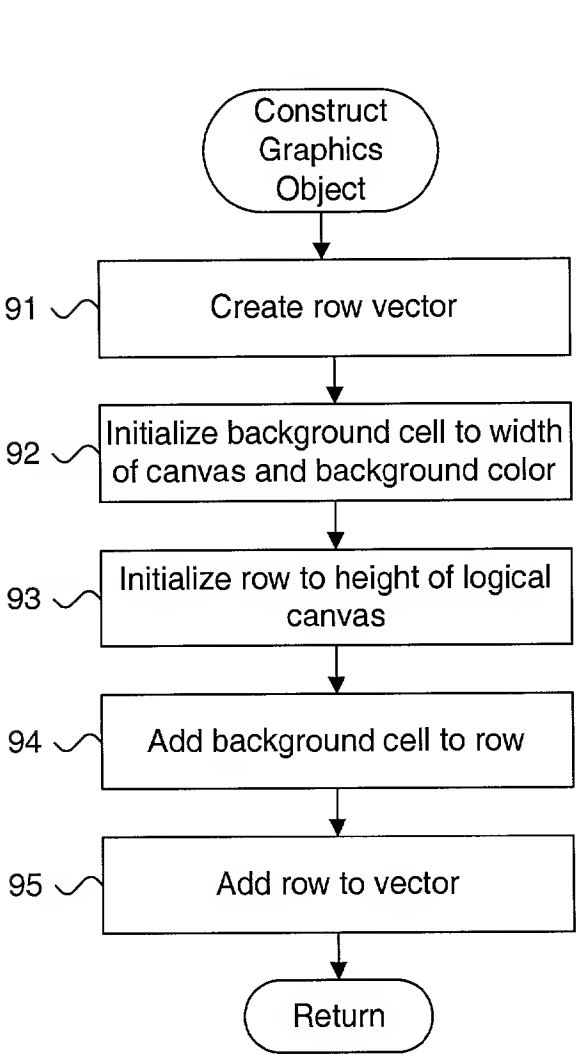

90
Construct Graphics Object
91
Create row vector
92
Initialize background cell to width of canvas and background color
93
Initialize row to height of logical canvas
94
Add background cell to row
95
Add row to vector
Return

Figure 7.

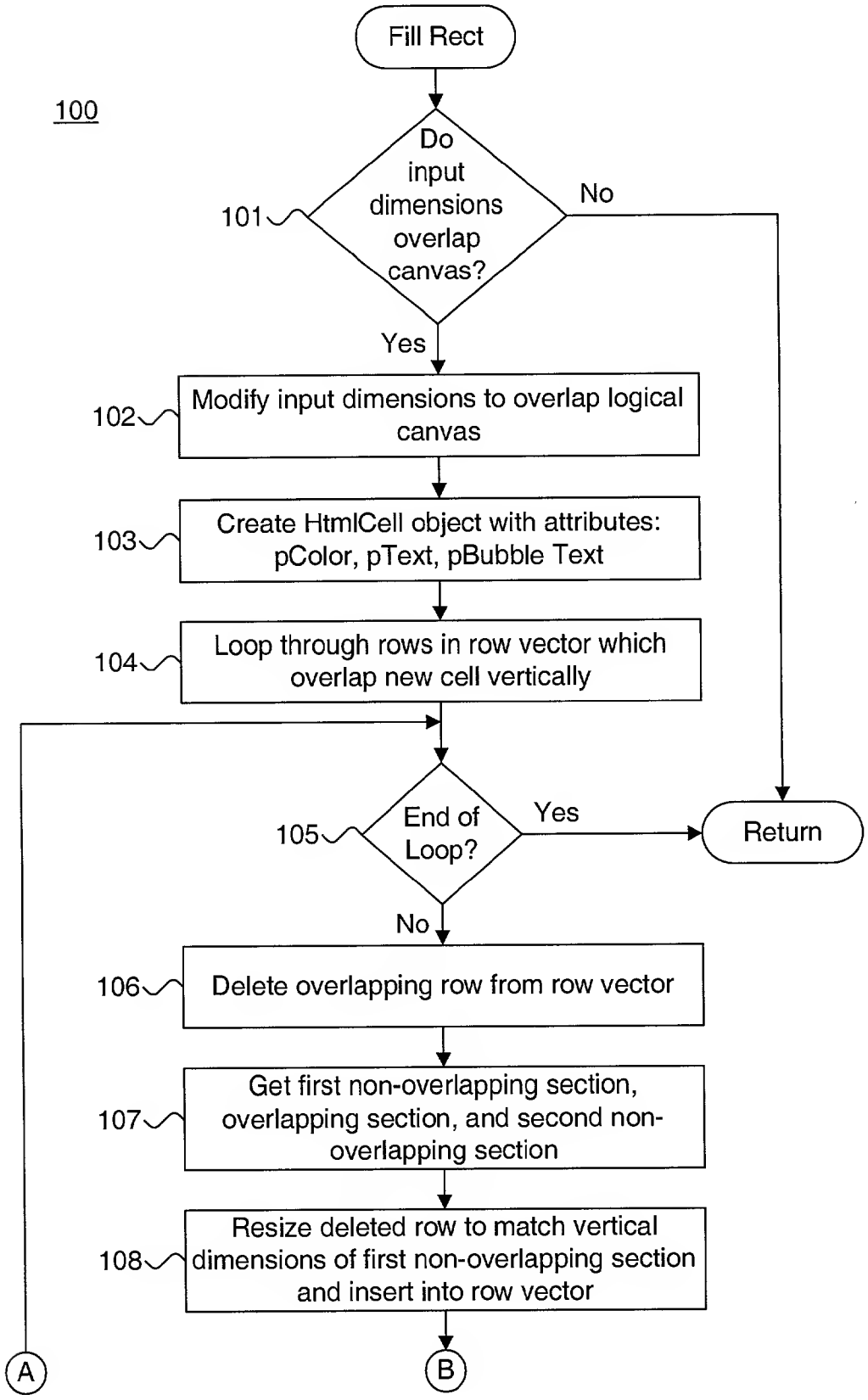

Fill Rect
100
Do input dimensions overlap canvas?
101
No
Yes
Modify input dimensions to overlap logical canvas
102
Create HtmlCell object with attributes: pColor, pText, pBubble Text
103
Loop through rows in row vector which overlap new cell vertically
104
End of Loop?
105
Yes
Return
No
Delete overlapping row from row vector
106
Get first non-overlapping section, overlapping section, and second non-overlapping section
107
Resize deleted row to match vertical dimensions of first non-overlapping section and insert into row vector
108
A
B

Figure 7 (con'd).

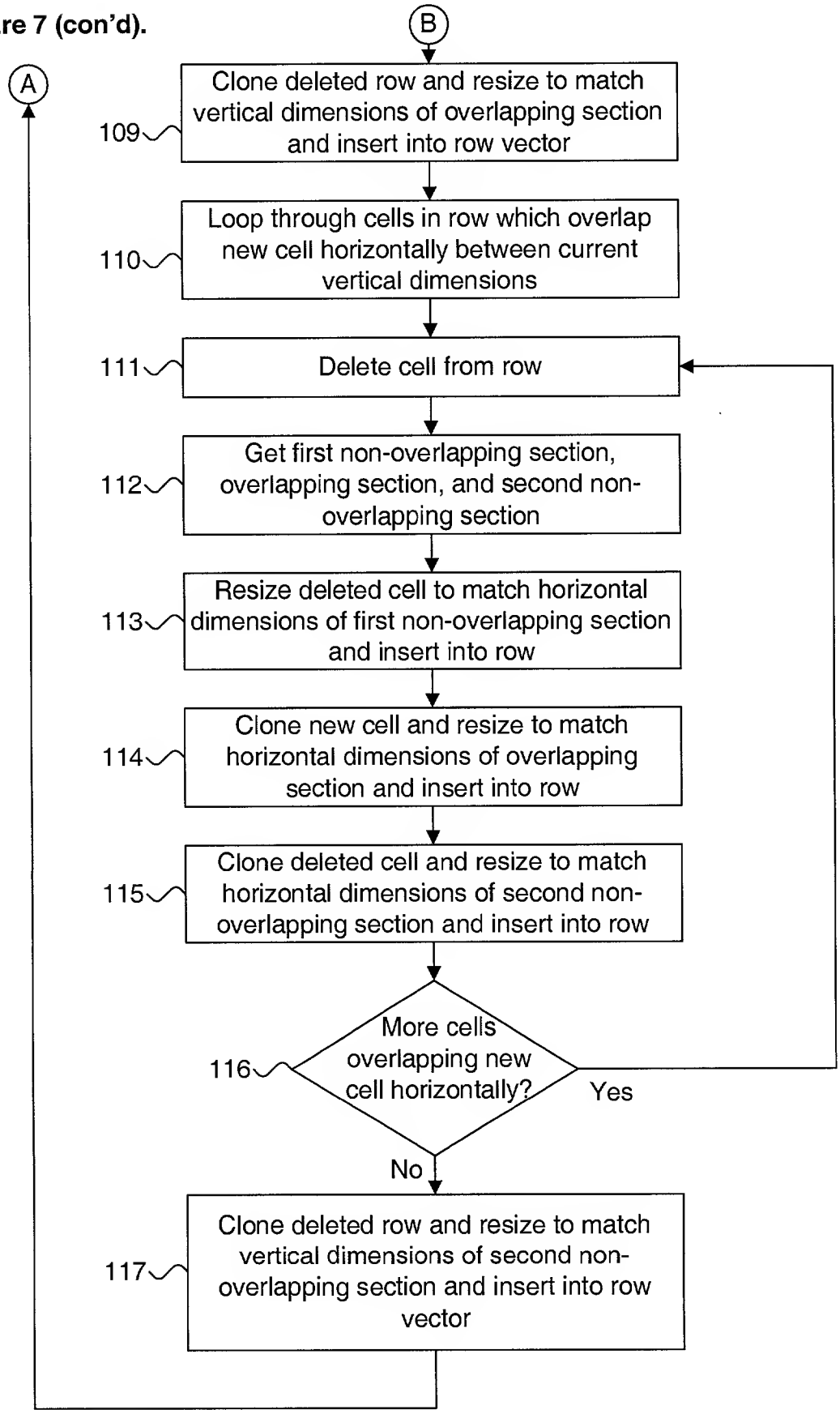


Figure 8.

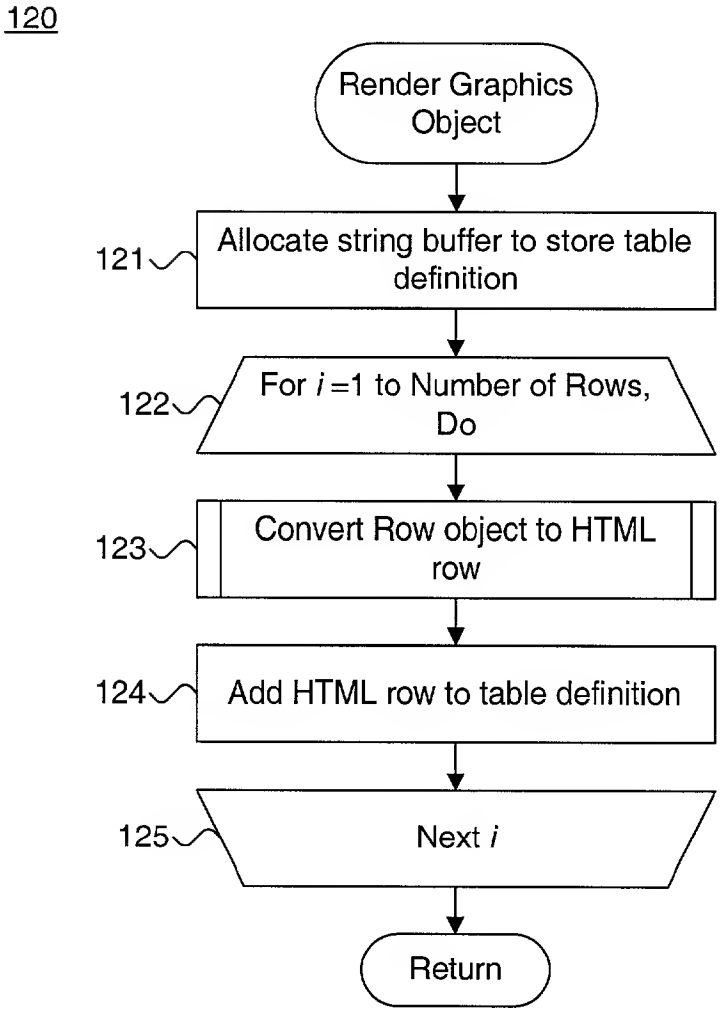

120
Render Graphics Object
121
Allocate string buffer to store table definition
122
For i =1 to Number of Rows, Do
123
Convert Row object to HTML row
124
Add HTML row to table definition
125
Next i
Return

Figure 9.

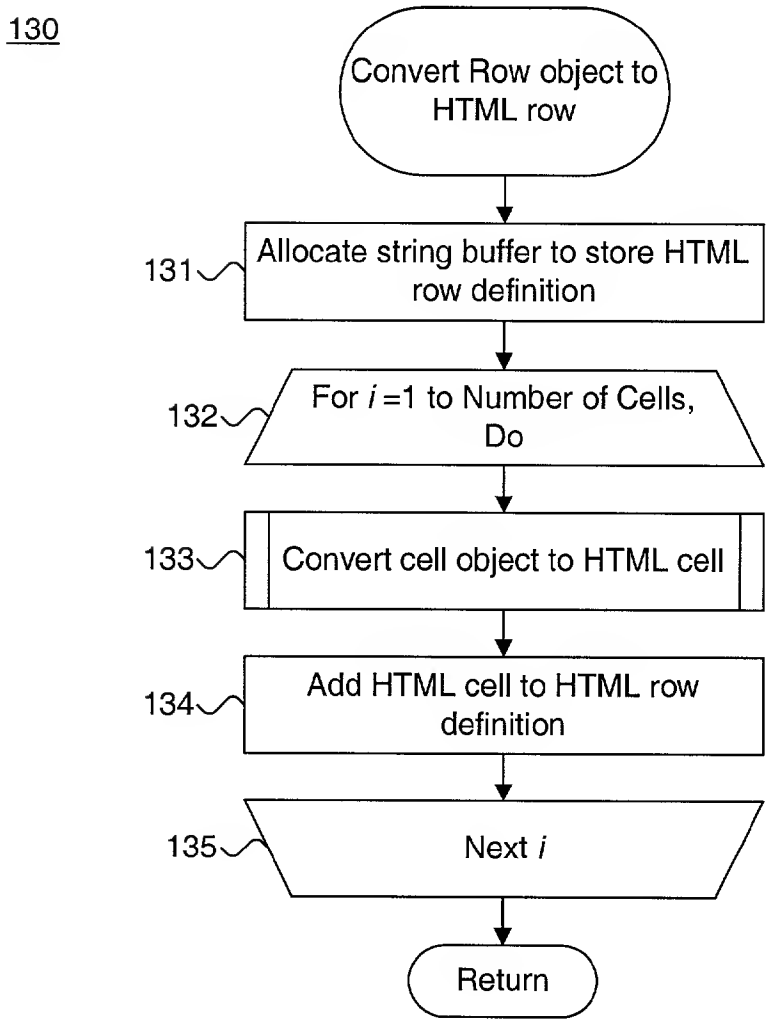
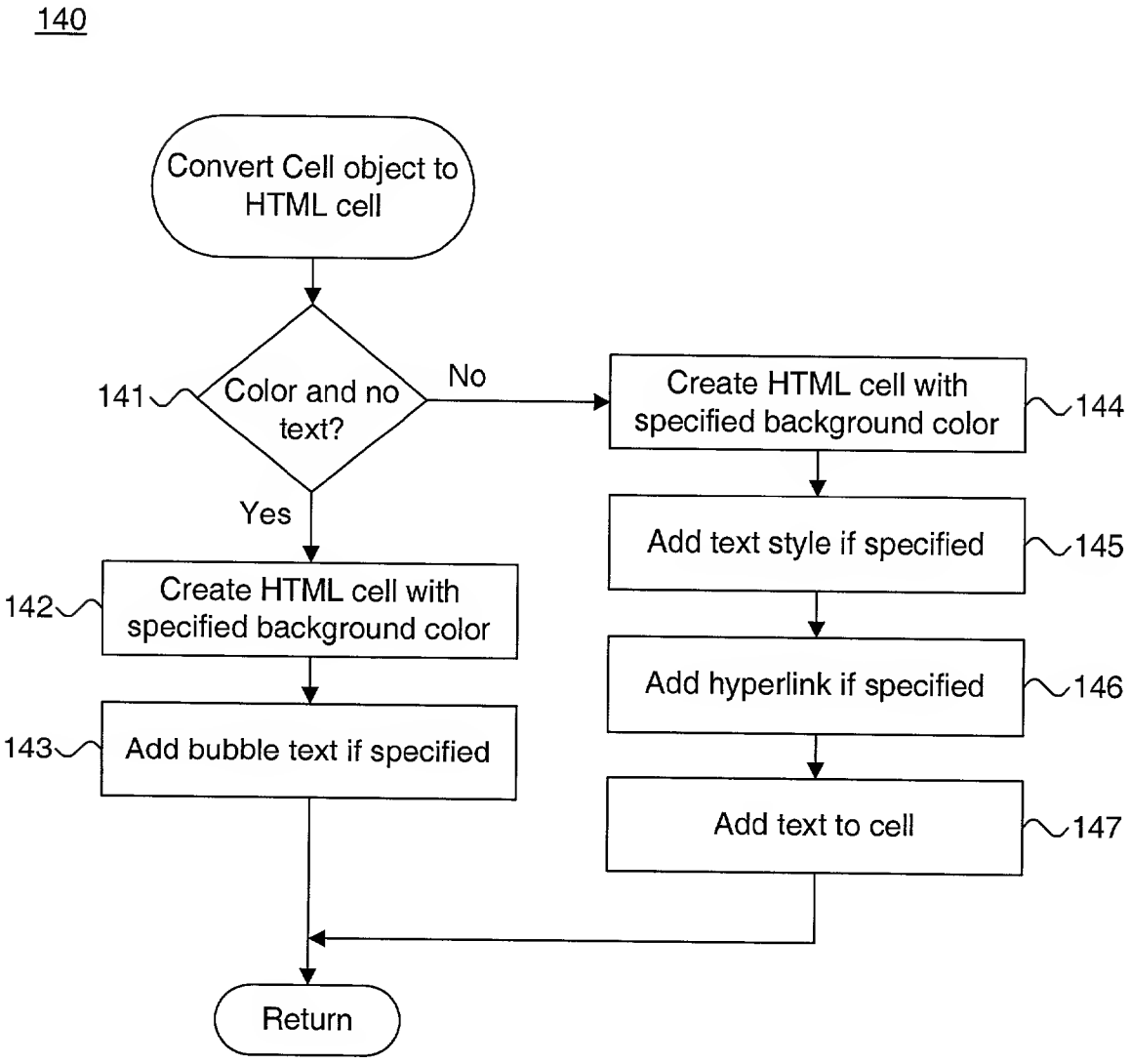

130
Convert Row object to HTML row
131
Allocate string buffer to store HTML row definition
132
For i =1 to Number of Cells, Do
133
Convert cell object to HTML cell
134
Add HTML cell to HTML row definition
135
Next i
Return

Figure 10.


140
Convert Cell object to HTML cell
141
Color and no text?
No
Yes
Create HTML cell with specified background color
144
Add text style if specified
145
Add hyperlink if specified
146
Add text to cell
147
142
Create HTML cell with specified background color
143
Add bubble text if specified
Return